



# 3rd Annual Meeting

## Proposal for extension of ARIES TNA and redistribution of budget

Maurizio Vretenar

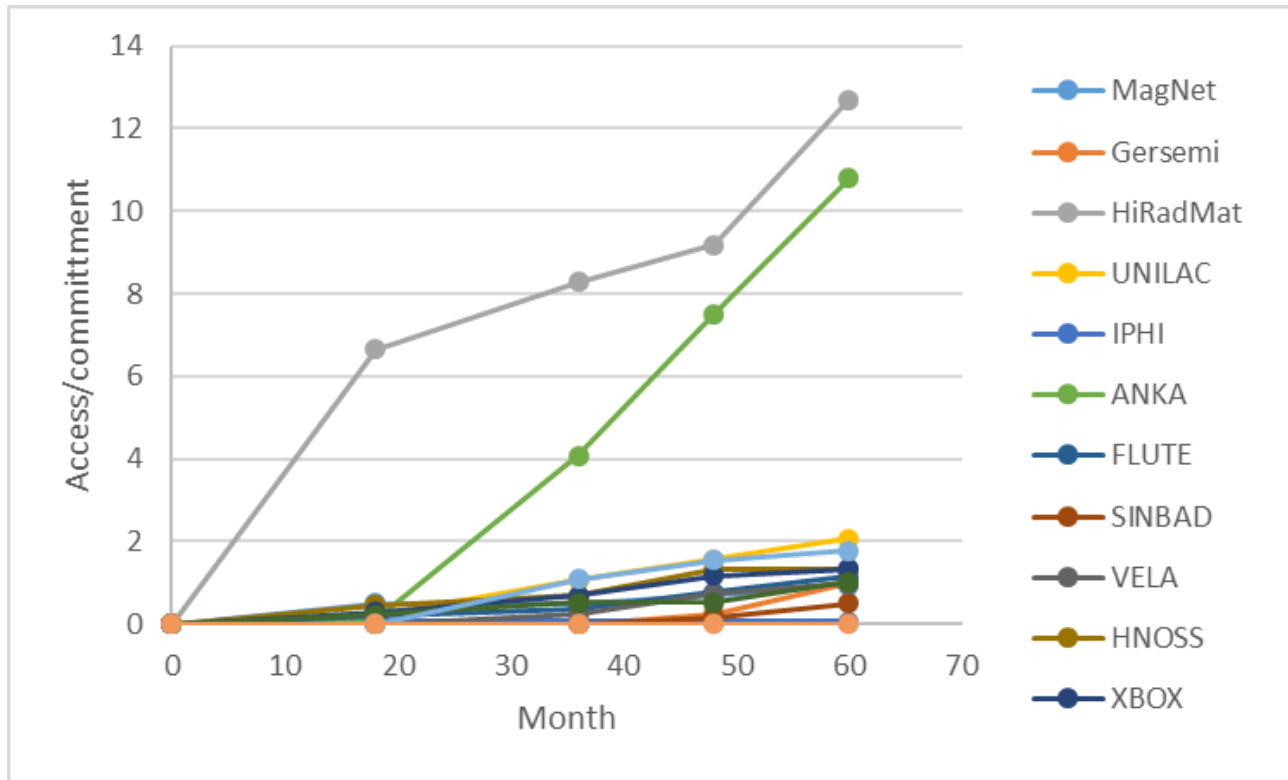
video, 19 April 2020

# Estimates as received

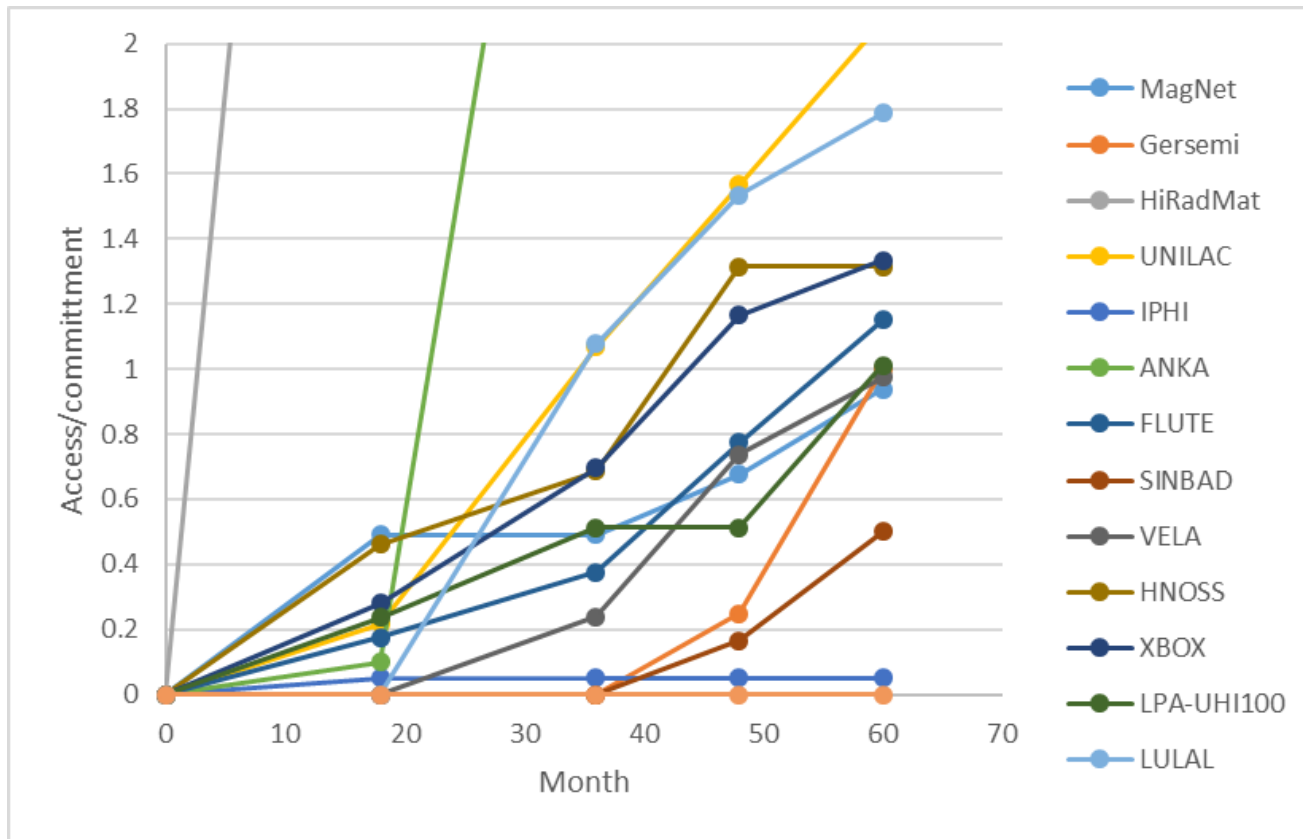
Facility	Institute	COMMITMENT (Annex1)			ACHIEVED at M18 (10/2018)			ACHIEVED at M36 (04/2020)			EXPECTED to M48 (05/2020-04/2021)			EXPECTED to M60 (05/2021-04/2022)		
		Projects	Users	Access Units	Projects	Users	Access Units	Projects	Users	Access Units	Projects	Users	Access Units	Projects	Users	Access Units
MagNet	CERN	8	40	1920	4	22	944	4	22	944	5	30	1300	6	35	1800
Gersemi	U. Uppsala	8	56	2880	0	0	0	0	0	0	2	8	720	8	32	2880
HiRadMat	CERN	5	20	200	6	37	1328	6	38	1656	9	52	1836	13	64	2538
UNILAC	GSI	8	48	480	2	21	104	4	33	512	4	33	752	4	33	992
IPHI	CEA	12	72	1440	1	4	72	1	4	72	1	4	72	2	6	72
ANKA	KIT	8	64	480	1	2	48	5	12	1952	8	23	3606	10	31	5184
FLUTE	KIT	8	40	320	2	7	56	2	9	120	2	9	248	3	15	368
SINBAD	DESY	9	36	630	0	0	0	0	0	0		6	105		18	315
VELA	STFC	14	56	336	0	0	0	2	10	80	5	23	248	7	33	328
HNOSS	U. Uppsala	4	44	2880	1	18	1330	3	40	3310	4	47	3790	4	47	3790
XBOX	CERN	4	64	6000	2	13	1680	3	19	4180	4	24	7000	4	24	8000
LPA-UHI100	CEA	4	40	640	1	5	152	2	11	328	2	11	328	4	26	648
LULAL	Un. Lund	6	36	480	0	0	0	3	20	517	4	30	737	5	35	857
Apollon	CNRS	6	48	180	0	0	0	0	0	0	0	0	0	0	0	0
		664	18866		20	129	5714	35	218	13671	50	300	20742	70	399	27772

*Last correction KIT Sunday night*

# Evolution



# Evolution - 2



# Guidelines – proposal 1

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- We have to agree on a «**reachable**» goal – we must be sure that we achieve our access target, otherwise the corresponding budget is lost.
- Proposal: take a «safety margin», and for example give to every facility a target that corresponds to **Y4 + 50% of Y5**.
- This is the only way to apply a common criterion to all, without judging on the individual capacity.
- For the same considerations of minimising risks, we have to assume that **IPHI** will not be able to go beyond the present (very low) access level and that **Apollon** will not start in time to provide accelerator access.

# Proposal for safety margin: 0.5\*times Y5

WP	Coordinator	Facility	Institute	COMMITMENT (Annex1)			ACHIEVED at M18 (10/2018)			ACHIEVED at M36 (04/2020)			EXPECTED to M48 (05/2020-04/2021)			EXPECTED to M60 (05/2021-04/2022)			Access Budget	Budget per New Unit	New Target
				Projects	Users	Access Units	Projects	Users	Access Units	Projects	Users	Access Units	Projects	Users	Access Units	Projects	Users	Access Units			
WP9	Marta BAJKO	MagNet	CERN	8	40	1920	4	22	944	4	22	944	5	30	1300	6	35	1800	154,425	80	1550
	Roger RUBER	Gersemi	U. Uppsala	8	56	2880	0	0	0	0	0	0	2	8	720	8	32	2880	115,685	40	1800
WP10-1	Yacine KADI	HiRadMat	CERN	5	20	200	6	37	1328	6	38	1656	9	52	1836	13	64	2538	102,556	513	2187
	Daniel SEVERIN	UNILAC	GSI	8	48	480	2	21	104	4	33	512	4	33	752	4	33	992	186,900	389	872
WP11	Jerome SCHWINDLING	IPHI	CEA	12	72	1440	1	4	72	1	4	72	1	4	72	2	6	72	248,624	173	72
	Robert RUPRECHT	ANKA	KIT	8	64	480	1	2	48	5	12	1952	5	12	3606	5	12	5184	233,387	486	4395
	Robert RUPRECHT	FLUTE	KIT	8	40	320	2	7	56	2	9	120	2	9	248	2	9	368	66,745	209	308
	Florian BURKART	SINBAD	DESY	9	36	630	0	0	0	0	0	0		6	105		18	315	147,000	233	210
	Anthony GLEESON	VELA	STFC	14	56	336	0	0	0	2	10	80	5	23	248	7	33	328	186,540	555	288
WP12	Roger RUBER	HNOSS	U. Uppsala	4	44	2880	1	18	1330	3	40	3310	4	47	3790	4	47	3790	201,542	70	3790
	Walter WUENSCH	XBOX	CERN	4	64	6000	2	13	1680	3	19	4180	4	24	7000	4	24	8000	125,875	21	7500
WP13	Sandrine DOBOSZ-D.	LPA-UHI100	CEA	4	40	640	1	5	152	2	11	328	2	11	328	4	26	648	111,905	175	488
	Olle LUNDH	LULAL	Un. Lund	6	36	480	0	0	0	3	20	517	4	30	737	5	35	857	116,850	243	797
	Brigitte CROS	Apollon	CNRS	6	48	180	0	0	0	0	0	0	0	0	0	0	0	0	240,114	1,334	0
				664	18866		20	129	5714	35	218	13671	47	289	20742	64	374	27772	2,238,148		

In orange the facilities that will not provide the committed access

# Budget reductions

- The facilities that will have a reduced access target should have their EC contribution for TNA reduced proportionally to the reduction in access provided.

Facility	Institute	Access Budget	Budget per Unit	New Target units	Budget change
MagNet	CERN	154,425	80	1,550	-29,759
Gersemi	U. Uppsala	115,685	40	1,800	-43,382
HiRadMat	CERN	102,556	513	2,187	
UNILAC	GSI	186,900	389	872	
IPHI	CEA	248,624	173	72	-236,193
ANKA	KIT	233,387	486	4,395	
FLUTE	KIT	66,745	209	308	-2,503
SINBAD	DESY	147,000	233	210	-98,000
VELA	STFC	186,540	555	288	-26,649
HNOSS	U. Uppsala	201,542	70	3,790	
XBOX	CERN	125,875	21	7,500	
LPA-UH100	CEA	111,905	175	488	-26,577
LULAL	Un. Lund	116,850	243	797	
Apollon	CNRS	240,114	1,334	0	-240,114
		2,238,148			-703,177



# Budget reallocation - 1

- We should reallocate the budget to the facilities that provide more access, proportionally to the value of the access provided (=applying the same coefficient EC contribution/unit as in the proposal).
- To pay for all the additional access promised, we would need many millions...

Facility	Institute	Access Budget	Budget per Unit	New Target units	Budget change
MagNet	CERN	154,425	80	1,550	-29,759
Gersemi	U. Uppsala	115,685	40	1,800	-43,382
HiRadMat	CERN	102,556	513	2,187	1,018,894
UNILAC	GSI	186,900	389	872	152,635
IPHI	CEA	248,624	173	72	-236,193
ANKA	KIT	233,387	486	4,395	1,903,563
FLUTE	KIT	66,745	209	308	-2,503
SINBAD	DESY	147,000	233	210	-98,000
VELA	STFC	186,540	555	288	-26,649
HNOSS	U. Uppsala	201,542	70	3,790	63,682
XBOX	CERN	125,875	21	7,500	31,469
LPA-UHI100	CEA	111,905	175	488	-26,577
LULAL	Un. Lund	116,850	243	797	77,170
Apollon	CNRS	240,114	1,334	0	-240,114
		2,238,148			2,544,235



# Budget reallocation -2

- Proposal: reallocation of the left-over at pro-rata of the proposed additional access, with the agreement that the contribution/unit can be reduced.

Facility	Institute	Access Budget	Budget per Unit	New Target units	Budget change	Ratio of increase	Increase in budget
MagNet	CERN	154,425	80	1,550	-29,759		
Gersemi	U. Uppsala	115,685	40	1,800	-43,382		
HiRadMat	CERN	102,556	513	2,187	1,018,894	0.31	220,626
UNILAC	GSI	186,900	389	872	152,635	0.05	33,051
IPHI	CEA	248,624	173	72	-236,193		
ANKA	KIT	233,387	486	4,395	1,903,563	0.59	412,187
FLUTE	KIT	66,745	209	308	-2,503		
SINBAD	DESY	147,000	233	210	-98,000		
VELA	STFC	186,540	555	288	-26,649		
HNOSS	U. Uppsala	201,542	70	3,790	63,682	0.02	13,789
XBOX	CERN	125,875	21	7,500	31,469	0.01	6,814
LPA-UHI100	CEA	111,905	175	488	-26,577		
LULAL	Un. Lund	116,850	243	797	77,170	0.02	16,710
Apollon	CNRS	240,114	1,334	0	-240,114		
		2,238,148			2,544,235		703,177

# Budget reallocation - 3

- Problem: the reallocation is very unbalanced in favour of KIT (which does not bring a large number of users). Could we ask KIT to reduce its target (and its contribution)?
- A limit to 3500 units would bring to a more balanced result:

Facility	Institute	Access Budget	Budget per Unit	New Target units	Budget change	New Target units	Budget change	Ratio of increase	Increase in budget
MagNet	CERN	154,425	80	1,550	-29,759	1550	-29,759		
Gersemi	U. Uppsala	115,685	40	1,800	-43,382	1800	-43,382		
HiRadMat	CERN	102,556	513	2,187	1,018,894	2187	1,018,894	0.36	254,766
UNILAC	GSI	186,900	389	872	152,635	872	152,635	0.05	38,165
IPHI	CEA	248,624	173	72	-236,193	72	-236,193		
ANKA	KIT	233,387	486	4,395	1,903,563	3500	1,468,393	0.52	367,159
FLUTE	KIT	66,745	209	308	-2,503	308	-2,503		
SINBAD	DESY	147,000	233	210	-98,000	210	-98,000		
VELA	STFC	186,540	555	288	-26,649	288	-26,649		
HNOSS	U. Uppsala	201,542	70	3,790	63,682	3790	63,682	0.02	15,923
XBOX	CERN	125,875	21	7,500	31,469	7500	31,469	0.01	7,868
LPA-UH100	CEA	111,905	175	488	-26,577	488	-26,577		
LULAL	Un. Lund	116,850	243	797	77,170	797	77,170	0.03	19,296
Apollon	CNRS	240,114	1,334	0	-240,114	0	-240,114		
		2,238,148			2,544,235		2,109,066		703,177

# Summary

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1. ARIES TNA is extended by 12 months (to 30 April 2022) with the goal of reaching the access goals, in particular for delayed or underperforming facilities.
2. The facility coordinators have provided their estimates for the access units to be achieved until April 2022.
3. Estimates for the additional year look high – we cannot risk failure, we must provide the units that we promise now (there is no other opportunity for modification).
4. To remain on the safe side, I am going to propose to the Governing Board to set for everybody a Target =  $[\text{Units}(\text{M48}) + 0.5 * \text{Units}(\text{M60})]$ .
5. The new budget is set for each facility at the pro-rata of the (EC budget / units) agreed in the proposal.
6. For the facilities with a target exceeding their agreed number of units, the target is reduced proportionally to the budget available.
7. Proposal to limit the additional access.

# Original Table

Table 3.2c: Summary of trans-national/virtual access provision

Access provider short name	Short name of infrastructure	Installation		Installation Country code	Type of access	Unit of access	Unit cost (UC) €	Min. quantity of access to be provided	Access costs		Estimated number of users	Estimated number of user projects
		Nr	Short name						On the basis of UC	As actual costs		
CERN*	MagNet	1	MagNet@CERN	IO	TA-uc	1h	0.00	1,920	1,548,825.60	-	40	8
UU	FREIA	1	Gersemi	SE	TA-ac	1h	-	2,880	-	183,212.80	56	8
CERN*	HiRadMat	2	HiRadMat@SPS	IO	TA-uc	1h	0.00	200	654,000.00	-	20	5
GSI	UNILAC	1	M-branch	DE	TA-uc	1h	274.79	480	131,900.00	-	48	8
KIT	KIT-ATP	1	KIT-ANKA	DE	TA-uc	1h	416.22	480	199,787.04	-	64	8
KIT	KIT-ATP	2	KIT-FLUTE	DE	TA-ac	1h	-	320	-	100,975.00	40	8
CEA	IPHI	1	IPHI	FR	TA-ac	1h	-	1,440	-	267,144.00	72	12
DESY*	SINBAD	1	SINBAD	DE	TA-ac	1h	-	630	-	257,500.00	36	9
STFC	VELA	1	VELA	UK	TA-ac	1h	-	336	-	198,737.87	56	14
UU	FREIA	2	HNOSS	SE	TA-ac	1h	-	2,880	-	199,585.15	44	4
CERN*	XBox	3	XBox@CERN	IO	TA-uc	1h	0.00	6,000	750,080.00	-	64	4
CNRS	LULI	1	APOLLON	FR	TA-ac	1h	-	180	-	695,456.25	48	6
CEA	LIDyL	2	LPA-UHI100	FR	TA-uc	1h	117.00	640	74,880.00	-	40	4
UL	LULAL	1	LULAL	SE	TA-uc	1h	170.00	480	81,600.00	-	36	6

**Total no. of users\*\* = 664**

Access units  
18,866